

CURRICULUM VITAE
GEORGE A. O'CONNOR

Personal Data

Office Address: Soil and Water Science Department
 University of Florida
 3169 McCarty A
 Gainesville, FL 32611-0290
 (352) 294-3167 Telephone
 (352) 392-3399 Fax
 GAO@UFL.EDU E-Mail

Citizenship: U.S.A.

Language Capability: English

Educational Background

BS, University of Massachusetts, 1966
MS, Colorado State University, 1968
PhD, Colorado State University, 1970
PhD Thesis: Diffusion of Fe and Fe Chelates in Soil

Professional Experiences**University**

Experience -- Assistant Professor of Soils,
 New Mexico State University, 1970-1975;

 Associate Professor of Soils,
 New Mexico State University, 1975-1981;

 Professor Soils,
 New Mexico State University, 1981-1991
 Acting Director, New Mexico Water Resource Institute 1982-1983

 Project Manager, New Mexico State University=s Interdisciplinary Sewage
 Sludge Project, 1981-1985 (50% time)

 University Fellow in Academic Administration, 1984-85

Chair, Soil Science Department, University of Florida, 1990-1994

Professor, Soil and Water Science Department
University of Florida, 1990-present

Overall Coordinator, Sustainable Land Application Conference, Jan 2004

Courses taught: Soil Chemistry (undergraduate); NMSU and Univ. FL.
Advanced Soil Chemistry (graduate); NMSU
Soil Physical Chemistry (graduate); NMSU
Soil & Plant Chemical Analysis (graduate); NMSU
Soil-Plant Relationships (graduate); NMSU and Univ. FL
Saline & Sodic Soils (undergraduate); NMSU
Agriculture as a Source of Pollution to the Environment (graduate);
NMSU
Special Problem subtitled Mineral Nutrition of Plants, team-
taught (graduate); NMSU
Technical Writing Workshop for graduate students; NMSU
Research Orientation and Perspectives (graduate); NMSU
Contaminant Behavior in Soils; team-taught; Univ. FL. (graduate)
Soil and Environmental Quality; Univ. FL (undergraduate)
Soils for Environmental Professionals; Univ. FL (graduate)
Soils, Water, and Public Health; Univ. FL (graduate/undergraduate)
Soil and Water Chemistry; Univ. FL (graduate/undergraduate)

Sabbatical

Washington State University 1976-77
University of Florida 1986

Honors

Outstanding Research Award, College of Agriculture,
New Mexico State University, 1981
International Who ' s Who in Education
Who ' s Who in the West
Who ' s Who in Technology Today
American Men & Women of Science
Fellow, Soil Science Society of America, 1986
New Mexico Eminent Scholar, 1989
Meritorious Service Award, NMSU, 1991
Fellow, American Society of Agronomy, 1995
Environmental Quality Research Award, 2005
UF Foundation Research Professor, 2006-2008

International Experience

1. Moscow, U.S.S.R. 1979. U.S.A. Representative to UN-sponsored course on saline soil reclamation (one Month).
2. Israel, 1980. Invited guest to discuss salinity and heavy metal problems (two weeks).
3. Germany, 1980. Faculty representative on NMSU team to foster GSF-NMSU research (one week).
4. Israel, 1984. Attend International Conference on salinity. (chaired session).
5. Egypt, 1984 and 1987. Invited to present lecture on using saline water for irrigation
6. London, 1984. Participant International Conference on Environmental Contamination.
7. Lisbon, Portugal, 1985. Participant International Conference on Management Strategies for Phosphorus in the Environment.
8. Venice, Italy. 1988. Participant International Conference on Environmental Pollution.
9. Burlington, Ontario, Canada. 1989. Invited speaker on sludge-borne organics bioavailability.
10. Stockholm, Sweden. 1989. Invited to conference on sludge application to land.
11. Israel, 1994. Invited speaker to conference on Modern Agriculture and Environment.
12. Vienna, Austria 1999. Invited paper, 5th International Conf. Biogeochemistry of Trace Elements.
13. Prague, Czech Republic, 1999. Invited seminar to Dept. Soil Science, Czech Univ. Agric.
14. Bangkok, Thailand, 2002. Participant, World Congress of Soil Science
15. Ireland, 2009. Invited reviewer of the PRTL I : Biosolids Programme at the Center for Sustainability, Institute of Technology Sligo.

Publications

Summary:

Journal Articles-150
 Proceedings-24
 Books-4
 Bulletins/Research Reports-11
 Extension Publications-4
 Abstracts->100 (not tabulated)

University Service: New Mexico State University:

Faculty Senate Representative to Student Senate, 1973;
 Faculty Advisor to Plant & Soil Association (Undergraduate Club) 1972;
 Member, Faculty Senate, 1973-1979;
 Member, College Committee/Energy in Agriculture, 1975, 80;
 Member, Graduate Advisory Council, 1974-1977; Chairman, 1976-77;

Member, Agronomy Department Head Search Committee, 1976
 Chairman, Graduate Dean Search Committee, 1977;
 Member, University Appeals board, 1975-1979;
 Member, Faculty Performance Review Board, 1981-85;
 Member, Westhafer Award Committee, 1981-1984;
 Member, Dept. Promotion and Tenure Committee, 1982-1985;
 1986-1990;
 Member, Fisheries and Wildlife Dept. Promotion & Tenure Comm.,
 1983;
 Member, Dir. Agric. Exp. Sta. Search Committee, 1983, 1989;
 Participant, Situational Leadership Workshop, 1983;
 Participant, Agric. Eng. Dept. Promotion & Tenure Committee, 1983;
 Member, Dept. Long Range Planning Committee, 1987-1990;
 Chairman, Dept. Graduate Committee, 1987-1990;
 Member, Dept. Head. Advisory Committee, 1989-1990.

University
of Florida:

University Senate, 1992-1994
 Affiliate faculty - College of Natural Resources and Environment
 Affiliate faculty - Hydrologic Sciences Cluster
 Member, College of Natural Resources and Environment, Admissions
 Committee and Undergraduate Curriculum Committee
 Member, Committee to develop new Interdisciplinary Studies major
 entitled Environmental Management in Agriculture
 Member, Committee to develop Peer Evaluation Procedure, Soil and
 Water Science Dept.
 Member, Water Research Council
 Member, Nutrient Recommendations Oversight Committee
 Member, N Bill Committee
 Chair, SWS Dept. Affiliate Appointments Committee
 Chair, SWS Dept. Teaching Committee
 Member, Interdisciplinary Graduate Degree Environmental Science Task
 Force
 Chair, Coordinating and Program Committees, Conf. On Sustainable Land
 Application
 Chair, CSREES Review Committee, 2006
 Member, IFAS Faculty Assembly, 2008-2010
 Chair, SWSD Administrative Affairs committee, 2009

Consulting Work:

Stroller Chemical Company, Inc.--A review of the use of metal chelates
 in plant nutrition, 1971;
 El Paso Natural Gas Company--Water quality criteria for livestock, 1972;
 land disposal of wastewater, 1986;
 Head Hydroponics Greenhouse--Fertility and testing recommendations,
 1973;

Sandia Laboratory--Environmental impact (soils) advice, nuclear waste disposal site--Carlsbad, NM, 1977;
 Laguna Indian Pueblo--Saline water utilization recommendations, 1978;
 American Association of Advancement of Science--Review and evaluate existing methodologies for conducting national resource surveys and environmental baseline studies in developing countries, 1981
 Chairman--Soils Panel;
 Chevron Oil--Environmental recommendations, 1981-1984;
 Life Systems, Inc.--Peer review Love canal Habitability Document, 1986;
 Organic Crop Improvement Assoc.--Recommendation on sewage sludge applications and safety, 1988;
 Jacobs Engineering Group--Na-amendment of radon barriers, 1988;
 U.S. EPA--Review panel for hazardous substance research center, 1988;
 U.S. EPA--Peer Review Comm. "503 Reg" - sludge disposal, 1989-92;
 U.S. Army, CRREL, Toxic organics considerations, 1993.
 U.S. EPA --Peer Reviewer Grad. Environ. Study Fellowships, 1998, 1999.
 Metropolitan Water Reclamation District of Greater Chicago--
 Recommendations on biosolids research and data interpretation, 2003-2007
 Univ. Texas/San Antonio – SCORE program review, 2005-2006
 International Molybdenum Association – research protocol review, 2007
 Colorado School Mines, WERF-sponsored State of Science report, 2009

National Reviewer

for:

BARD (proposals);
 USDA/ARS (proposals);
 Dept. of Interior (proposals);
 J. Environ. Qual. (journal articles);
 Environ. Sci. Technol. (journal articles)
 NIH (proposals);
 Soil Science (journal articles);
 Soil Science Society of America Journal; (journal articles);
 NSF (proposals);
 NIEHS (proposals)

Other Activities

Honor Societies:Phi Kappa Phi

Gamma Sigma Delta (President-Elect, 1985; President, 1986).
 Sigma Xi (Secretary-Treasurer, 1973; President-Elect, 1974;
 President, 1975)
 Alpha Zeta
 Phi Kappa Phi

Professional Organizations: Council for Agricultural Science & Technology (CAST)
 American Society of Agronomy
 Soil Science Society of America
 Soil and Crop Science Society Florida
 American Chemical Society
 Water Environment Federation

Society Service: Associate Editor Soil Science Society of America Journal, Div. S-2, 1980-1986
 Amer. Soc. Agronomy CIBA-Geigy Award Committee, 1980-83; Chairman, 1983
 Amer. Soc. Agronomy, Bouyoucous Award Committee, 1983-85; 1988-90
 Amer. Soc. Agronomy, General Awards Committee, 1980-83
 Amer. Soc. Agronomy, Environmental Quality Research Award Comm, 1983-1985 (Chair, 1985); 2001-2003 (Chair, 2003)
 Soil Sci. Soc. Amer, Glossary Comm., 1977-79; 1986-87
 Western Soil Sci. Soc. Amer.--Various nominating committees, 1983-1990
 American Soc. Agronomy, Div. A-5 (Environ. Qual.) Chairman, 1986
 Associate Editor, Journal Environmental Quality, 1989-1992; 2004
 Board Rep. Div. S-2, Soil Sci. Soc. Amer., 1989-1992
 Soil Science Society Amer, Fellows Selection Committee, 1994-1995
 Soil Science Society America representative to WASTECH (a cooperative program advancing the use of innovative waste treatment technologies, managed by the American Academy of Environmental Engineers); 1996-1998.
 Soil Science Society of America, Comm. Organ. Bylaws and Policy, 2000

PUBLICATIONS

Journal Articles

1. O' Connor, G.A. and W.D. Kemper. 1969. Quasi-crystals in Na-Ca systems. *SSSA Proc.* 33:464-468
2. O' Connor, G.A. 1971. Testing sodium hazard predications. *SSSA Proc.* 35:510-511.
3. O' Connor, G.A., W.L. Lindsay, and S.R. Olsen. 1971. Diffusion of iron and iron chelates in soil. *SSSA Proc.* 35:407-410.
4. Anderson, J.U. and G.A. O' Connor. 1972. Production of permanganate ion by sodium hypochlorite treatment to remove soil organic matter. *SSSA Proc.* 36:973-974.
5. O' Connor, G.A. 1973. Iron chlorosis and iron status of soils. *Comm. Soil Sci. & Plant Analysis* 4:175-178.
6. O' Connor, G.A. and P.J. Wierenga. 1973. The persistence of 2,4,5-T in greenhouse lysimeter studies. *SSSA Proc.* 37:398-400.
7. Williams, S.E. and George A. O' Connor. 1973. Chemical fertilization of fourwing saltbush. *J. Range Mgmt.* 26:379-380. (Also appears in *Selecciones el Journal of Range Mgmt.* 2:120-212.)
8. O' Connor, G.A. 1973. Study questions as learning tools. *J. Agron. Educ.* 2:72-74.
9. Anderson, J.U., K.E. Fadul, and G.A. O' Connor. 1973. Factors affecting the linear extensibility in vertisols. *Soil Sci. Soc. Amer. Proc.* 37:296-299
10. O'Connor, G.A. and J.U. Anderson. 1974. Soil factors affecting the adsorption of 2,4,5-T. *Soil Sci. Soc. Amer. Proc.* 38:433-436.
11. C. Cadena, F., W.S. Midkiff and G.A. O'Connor. 1974. The calcium carbonate ion-pair as a limit to hardness removal. *J. Amer. Water Works Assoc.* p. 524-526.
12. O'Connor, G.A., W.L. Lindsay, and S.R. Olsen. 1975. Iron diffusion to plant roots. *Soil Sci.* 119:285-289.
13. O'Connor, G.A., M.M. Lentner, and R.M. Glaze. 1975. A teaching effectiveness questionnaire. *J. Agron. Ed.* 3:86-90.
14. O'Connor, G.A. and F. Cadena C. 1975. Calcite equilibrium in mixed ion aqueous systems open to the atmosphere. *Soil Sci.* 120:182-187.

15. Wierenga, P.J., M.J. Schaeffer, S.P. Gomez, and G.A. O'Connor. 1975. Predicting ionic distributions in large soil columns. *SSSAP* 39:1080-1084.
16. Sullivan, D.T., G.A. O'Connor, and E. Herrera-Aguirre. 1976. The effect of controlled-availability nitrogen fertilizers on mature pecan trees. *Soil Sci. Soc. Amer. J.* 40:470-472.
17. O'Connor, G.A., M. Th. van Genuchten, and P.J. Wierenga. 1976. Predicting 2,4,5-T movement in soil columns. *J. Environ. Qual.* 5:375-378.
18. O'Connor, G.A. and C.Cull. 1976. An evaporation chamber with constant suction. *Soil Sci. Soc. Amer. J.* 40:618-619.
19. van Genuchten, M. Th., P.J. Wierenga, and G.A. O'Connor. 1977. Mass transfer studies in sorbing porous media: III. Experimental evaluation with 2,4,5-T. *Soil Sci. Soc. Amer. J.* 41:278-285.
20. Koskinen, W., G.A. O'Connor, and H.H. Cheng. 1979. Adsorption and release of 2,4,5-T from two soils. *Soil Sci. Soc. Amer. J.* 43:871-874.
21. Weber, S.J., M. Essington, G.A. O'Connor, and W. Gould. 1978. Infiltration studies with sodic mine spoil material. *Soil Sci* 128:312-318.
22. O'Connor, G.A., P.J. Wierenga, H.H. Cheng, and K.G. Doxtader. 1980. Simulation of 2,4,5-T behavior in large soil columns. *Soil Sci.* 130:157-162.
23. Amonette, J. and G.A. O'Connor. 1980. Nonionic surfactant effects on adsorption and degradation 2, 4-D. *Soil Sci. Soc. Amer. J.* 44:540-544.
24. Park, C.S. and G.A. O'Connor. 1980. Salinity effects on the hydraulic property of soils. *Soil Sci. Soc.* 130:167-174.
25. O'Connor, G.A. and B.D. McCaslin. 1980. Fertility value of gamma-irradiated sewage sludge. *Trans. Amer. Nucl. Soc.* 34:336-338.
26. O'Connor, G.A., B.C. Fairbanks, and E.A. Doyle. 1981. Effects of sewage sludge amendment on phenoxy herbicide adsorption and degradation in soils. *J. Environ. Qual.* 10:510-515.
27. Bowman, R.S., M.E. Essington, and G.A. O'Connor. 1981. Soil sorption of nickel: influence of solution composition. *Soil Sci. Soc. Am. J.* 45:860-865.
28. Elrashidi, M.A. and G.A. O'Connor. 1982. Boron sorption and desorption in soils. *Soil Sci. Soc. Am. J.* 46:27-31.
29. Elrashidi, M.A. and G.A. O'Connor. 1982. Influence of solution composition on sorption of

- zinc by soils. *Soil Sci. Soc. Am. J.* 46:1153-1158.
30. Keren, R. and G.A. O'Connor. 1982. Adsorption of boron by montmorillonite and illite clays--exchangeable ions and ionic strength effects. *Clays and Clay Minerals* 30:341-346.
 31. Keren, R. and G.A. O'Connor. 1982. Gypsum dissolution and sodic soil reclamation as affected by water flow velocity. *Soil Sci. Soc. Am. J.* 46:726-732.
 32. Bowman, R.A. and G.A. O'Connor. 1982. Control of Ni and Sr sorption by free metal ion activity. *Soil Sci. Soc. Amer. J.* 46:933-936.
 33. O'Connor, G.A., M.E. Essington, M.A. Elrashidi, and R.S. Bowman. 1983. Nickel and zinc sorption in sludge-amended soils. *Soil Sci.* 135:228-235.
 34. Keren, R. and G.A. O'Connor. 1983. Strontium adsorption by non-calcareous soils--exchangeable ions and solution composition effects. *Soil Sci.* 135:308-315.
 35. Fairbanks, B.C. and G.A. O'Connor. 1984. Effect of sewage sludge on the adsorption of PCBs by three New Mexico soils. *J. Environ. Qual.* 13:297-300.
 36. Bowman, R.S., N.S. Urquhart, and G.A. O'Connor. 1984. Statistical evaluation of sorption isotherm data. *Soil Sci.* 137:360-369.
 37. O'Connor, G.A., Candice O'Connor, G.R. Cline. 1984. Sorption of cadmium by calcareous soils: influence of solution composition. *Soil Sci. Soc. Amer. J.* 48:1244-1247.
 38. Cline, G.R. and G.A. O'Connor. 1984. Cadmium sorption and mobility in sludge-amended soils. *Soil Sci.* 138:248-254.
 39. Fairbanks, B.C., N. Schmidt, and G.A. O'Connor. 1985. Butanol degradation and volatilization in soils amended with spent acid or reagent grade acid. *J. Environ. Qual.* 14:83-86.
 40. Fairbanks, B.C., G.A. O'Connor, and S.E. Smith. 1985. Fate of di-2-(ethylhexyl) phthalate in three sludge-amended New Mexico soils. *J. Environ. Qual.* 14:479-483.
 41. O'Connor, G.A., K.L. Knudtsen and G.A. Connell. 1986. Phosphorus solubility in sludge-amended calcareous soils. *J. Environ. Qual.* 15:308-312.
 42. Knudtsen, K. and G.A. O'Connor. 1987. Characterization of iron and zinc in Albuquerque sewage sludge. *J. Environ. Qual.* 16:85-90.
 43. Fairbanks, B.C., G.A. O'Connor, and S.E. Smith. 1987. Mineralization and volatilization of polychlorinated biphenyls in sludge-amended soils. *J. Environ. Qual.* 16:18-25.

44. Jacobs, L.W., G.A. O'Connor, M.A. Overcash, M.J. Zabik, and P. Rygiewicz. 1987. Effects of trace organics in sewage sludge on soil-plant systems and assessing their risk to humans. Ch. 6. In: Land Application of Sludge [eds.] A.L. Page, T.J. Logan, and J. A. Ryan. Lewis Publ., Inc. Chelsea, MI.
45. O'Connor, G.A. 1988. Use and misuse of DTPA soil test. *J. Environ. Qual.* 17:715-718.
46. Aranda, J., G.A. O'Connor, and G.A. Eiceman. 1989. Effects of sewage sludge on DEHP uptake by plants. *J. Environ. Qual.* 18:45-50.
47. Ryan, J.A., R.M. Bell, J.M Davidson, and G.A. O'Connor. 1988. Plant uptake of non-ionic organic chemicals from soil. *Chemosphere* 17:2299-2323.
48. Eiceman, G.A., J.L. Gardea-Torresdey, G.A. O'Connor, and N.S. Urquhart. 1989. Sources of error in analysis of municipal sludges and sludge-amended soils for DEHP. *J. Environ Qual.* 18:374-379.
49. O'Connor, G.A., K. Kiehl, and G.A. Eiceman. 1990. Plant uptake of sludge-borne PCBs. *J. Environ. Qual.* 19:113-118.
50. Yan, Jin, and G.A. O'Connor. 1990. Toluene behavior in sludge-amended soils. *J. Environ. Qual.* 19:573-579.
51. O'Connor, G.A., J.R. Lujan, and Yan Jin. 1990. Adsorption, degradation and plant uptake of 2, 4-dinitrophenol in sludge-amended calcareous soils. *J. Environ. Qual.* 19:587-593.
52. Bellin, C.A., and G.A. O'Connor. 1990. Plant uptake of pentachlorophenol from sludge-amended soils. *J. Environ. Qual.* 19:598-602.
53. Bellin, C.A., G.A. O'Connor, and Yan Jin. 1990. Adsorption and degradation of pentachlorophenol in sludge-amended soils. *J. Environ. Qual.* 19:603-608.
54. O'Connor, G.A., R.L. Chaney, and J.A. Ryan. 1991. Bioavailability to plants of sludge-borne toxic organics. *Rev. Environ. Contamin. Toxicol.* 121:129-156.
55. Chaney, R.L., J.A. Ryan, and G.A. O'Connor. 1991. Risk assessment for organic micro pollutants: U.S. point of view. pp. 141-158. In: *Treatment and Use of Sewage Sludge and Liquid Agricultural Wastes.* (ed.) P.L. "Hermite. Elsevier Applied Sci. N.Y.
56. Eiceman, G.A., N.S. Urquhart, and G.A. O'Connor. 1993. Logistic and economic principles in gas chromatography - mass spectrometry use for plant uptake investigations. *J. Environ. Qual.* 22:167-173.
57. O'Connor, G.A. 1996. Organic compounds in sludge-amended soils and their potential uptake by crop plants. *Sci. Total Environ.* 185:71-81.

58. Chaney, R.L., J.A. Ryan, and G.A. O'Connor. 1996. Organic contaminants in municipal biosolids: risk assessment, quantitative pathways analysis, and current research priorities. *Sci. Total Environ.* 185:187-216.
59. Reddy, K.R., G.A. O'Connor, and P.H. Gale. 1998. Phosphorus sorption capacities of wetland soils and stream sediments impacted by dairy effluent. *J. Environ. Qual.* 27:438-447.
60. Ruple, G.J., D. Sarkar, G.A. O'Connor, and J.B. Sartain. 1999. Reuse of Carlton reject water. I. Effects on bermudagrass yields. *Soil Crop Sci. Soc. Fl. Proc.* 58:31-38.
61. Sarkar, D., G.A. O'Connor, G.J. Ruple, and J.B. Sartain. 1999. Reuse of Carlton reject water. II. Fate and transport of ^{226}Ra . *Soil Crop Sci. Soc. Fl. Proc.* 58:38-44.
62. O'Connor, G.A., and L.R. McDowell. 1999. Understanding fate, transport, bioavailability, and cycling of metals in land-applied biosolids. Technical Final Report 95-REM-3, Water Environment Research Foundation, Alexandria VA.
63. Tiffany, M.E., L.R. McDowell, G.A. O'Connor, F.G. Martin, and N.S. Wilkinson. 1999. Comparison of collection methods for determination of forage nutritive status. *Commun. Soil Sci. Plt. Anal.* 30:2731-2741.
64. Tiffany, M.E., L.R. McDowell, G.A. O'Connor, F.G. Martin, and N.S. Wilkinson. 1999. Variation of forage and extractable soil minerals over two grazing seasons in north Florida. *Commun. Soil Sci. Plt. Anal.* 30:2743-2754.
65. Lu, Peng, and G.A. O'Connor. 1999. Factors affecting P reactions in soils: potential sewage sludge effects. *Soil Crop Sci. Soc. FL. Proc.* 58:66-71.
66. Brinton, S., and G.A. O'Connor. 1999. Factors affecting Mo sorption in soils: potential biosolids effects. *Soil Crop Sci. Soc. Florida. Proc.* 59: 117-123.
67. Tiffany, M.E., L.R. McDowell, G.A. O'Connor, H. Nguyen, F.G. Martin, N.S. Wilkinson, and E.C. Cardoso. 2000. Effects of pasture-applied biosolids on forage and soil concentrations over a grazing season in north Florida. I. Macrominerals, crude protein, and in vitro digestibility. *Commun. Soil Sci. Plt. Anal.* 31:201-213.
68. Tiffany, M.E., L.R. McDowell, G.A. O'Connor, H. Nguyen, F.G. Martin, N.S. Wilkinson, and E.C. Cardoso. 2000. Effects of pasture-applied biosolids on forage and soil concentrations over a grazing season in north Florida. II. Microminerals. *Commun. Soil Sci. Plt. Anal.* 31:215-227.
69. Tiffany, M.E., L.R. McDowell, G.A. O'Connor, F.G. Martin, N.S. Wilkinson, E.C. Cardoso, S.S. Percival, and P.A. Rabiansky. 2000. Effects of pasture applied biosolids on performance and mineral status of grazing beef heifers. *J. Anim. Sci.* 78:1331-1337.

70. Tiffany, M.E., L.R. McDowell, G.A. O'Connor, H. Nguyen, F.G. Martin, N.S. Wilkinson, and N.A. Katowitz. 2001. Effects of residual and reapplied biosolids on forage and soil concentrations over a grazing season in north Florida. I. Macrominerals, crude protein, and in vitro digestibility. *Commun. Soil Sci. Plant Anal.* 32: 2189-2209.
71. Tiffany, M.E., L.R. McDowell, G.A. O'Connor, H. Nguyen, F.G. Martin, N.S. Wilkinson, and N.A. Katowitz. 2001. Effects of residual and reapplied biosolids on forage and soil concentrations over a grazing season in north Florida. II. Microminerals. *Commun. Soil Sci. Plant Anal.* 32:2211-2226.
72. O'Connor, G.A., T.C. Granato, and R.H. Dowdy. 2001. Bioavailability of biosolids-Mo to corn. *J. Environ. Qual.* 30:140-146.
73. Lu, Peng, and G.A. O'Connor. 2001. Biosolids effects on P retention and release in some sandy FL soils. *J. Environ. Qual.* 30:1059-1063.
74. Anjos, J.T., D. Sarkar, and G.A. O'Connor. 2001. Extractable-P in biosolids and biosolids-amended soils: an incubation study. *Revista de Estudos Ambientais (Environ. Studies J.)* 2 (2-3):68-76.
75. O'Connor, G.A., T.C. Granato, and N.T. Basta. 2001. Bioavailability of biosolids-Mo to soybean grain. *J. Environ. Qual.* 30:1653-1658.
76. Sarkar, D. and G.A. O'Connor. 2001. Using the Pi soil test to estimate available P in biosolids-amended soils. *Commun. Soil Sci. Plt. Anal.* 32:2049-2063.
77. Sarkar, D. and G.A. O'Connor. 2001. Estimating available Mo in a biosolids-amended soil using iron oxide impregnated filter paper. *Commun. Soil Sci. Plt. Anal.* 32:2033-2048.
78. O'Connor, G. A., Robert B. Brobst, Rufus L. Chaney, Ron L. Kincaid, Lee R. McDowell, Gary M. Pierzynski, Alan Rubin, and Gary G. Van Riper. 2001. A modified risk assessment to establish molybdenum standards for the land applications of biosolids. *J. Environ. Qual.* 30:1490-1507.
79. O'Connor, G.A., T.C. Granato, and N.T. Basta. 2001. Bioavailability of biosolids molybdenum to soybean grain. *J. Environ. Qual.* 30:1653-1658.
80. Elliott, H.A., G.A. O'Connor, and S.R. Brinton. 2002. Phosphorus leaching from biosolids-amended sandy soil. *J. Environ. Qual.* 31:681-689.
81. Elliott, H.A., G.A. O'Connor, P. Lu, and S.R. Brinton. 2002. Impact of water treatment residuals on phosphorus solubility and leaching in biosolids-amended sandy soil. *J. Environ. Qual.* 31:1362-1369.
82. O'Connor, G.A., H.A. Elliott, and P. Lu. 2002. Characterizing water treatment residuals

- phosphorus retention. *Soil Crop Sci. Soc. FL Proc.* 61:67-73.
83. Tiffany, M.E., L.R. McDowell, G.A. O'Connor, F.G. Martin, N.S. Wilkinson, S.S. Percival, and P.A. Rabianski. 2002. Effects of residual and reapplied biosolids on performance and mineral status of grazing beef steers. *J. Anim. Sci.* 80:260-269.
 84. Brinton, S.R. and G.A. O'Connor. 2003. Sorption of molybdenum in soils field-equilibrated with biosolids. *Commun. Soil Sci. Plt. Anal.* 34: 1341-1346.
 85. Sarkar, D. and G.A. O'Connor. 2004. Plant responses to biosolids-P in two Florida soils with high P content. *Commun. Soil Sci. Plt. Anal.* 35: 1569-1589.
 85. O'Connor, G.A., D. Sarkar, S.R. Brinton, H.A. Elliott, and F.G. Martin. 2004. Phytoavailability of biosolids-P. *J. Environ. Qual.* 33: 703-712.
 86. Brandt, R.C., H.A. Elliott, and G.A. O'Connor. 2004. Water extractable P in biosolids: implications for land-based recycling. *Water Environ. Res.* 76: 121-129.
 87. Makris, K.C., H. El-Shall, W.G. Harris, G.A. O'Connor, and T.A. Obreza. 2004. Intraparticle P diffusion in a drinking water residual at room temperature. *J. Colloid & Interf. Sci.* 277 (2): 417-423.
 88. Makris, K.C., W.G. Harris, G.A. O'Connor, and T.A. Obreza. 2004. Phosphorus immobilization in micropore of drinking-water treatment residuals: Implications for long-term stability. *Environ. Sci. Technol.* 38: 6590-6596.
 89. O'Connor, G.A., H.A. Elliott, N.T. Basta, R.K. Bastian, G.M. Pierzynski, R.C. Sims, and J.E. Smith, Jr. 2005. Sustainable land application: an overview. *J. Environ. Qual.* 34: 7-17.
 90. Makris, K.C., W.G. Harris, G.A. O'Connor, and H. El-Shall. Long-term phosphorus effects on evolving physiochemical properties of iron and aluminum hydroxides. *J. Colloid & Interf. Sci.* 287:552-560.
 91. Makris, K.C., W.G. Harris, G.A. O'Connor, T.A. Obreza, and H.A. Elliott. 2005. Physiochemical properties related to long-term phosphorus retention by drinking water treatment residuals. *Environ. Sci. Technol.* 39: 4280-4289.
 92. Elliott, H.A., J.M. Potter, J.H. Kang, R.C. Brandt, and G.A. O'Connor. 2005. Neutral ammonium citrate extraction of biosolids phosphorus. *Commun. Soil Sci. Plt. Anal.* 36: 2447-2459.
 93. Elliott, H.A., R.C. Brandt, and G.A. O'Connor. 2005. Runoff phosphorus losses from surface-applied biosolids. 2005. *J. Environ. Qual.* 34: 1362-1639.
 94. O'Connor, G.A., S.R. Brinton, and M.L. Silveira. 2005. Evaluation and selection of soil

- amendments for field testing to reduce P losses. *Soil Crop Sci. Soc. Florida. Proc.* 64: 22-34.
95. Makris, K.C., G.A. O'Connor, W.G. Harris, and T.A. Obreza. 2005. Relative efficacy of a drinking water treatment residual and alum in reducing P release from poultry litter. *Commun. Soil Sci. Plt. Anal.* 36: 2657-2676.
 96. Silveira, M.L., M.K. Miyattah, and G.A. O'Connor. 2006. Phosphorus release from a manure-impacted Spodosol: effects of a water treatment residual. *J. Environ. Qual.* 35:529-541.
 97. Van Alstyne, R., L.R. McDowell, P.A. Davis, N.S. Wilkinson, L.K. Warren, and G.A. O'Connor. 2006. Effects of dietary aluminum from an aluminum water treatment residual on bone density and bone mineral content of feeder lambs. *The Professional Animal Scientist* 22:153-157.
 98. Silveira, M.L., L.R.F. Alleoni, G.A. O'Connor, and A.C. Chang. 2006. Heavy metal sequential extraction methods: a modification for tropical soils. *Chemosphere* 64:1929-1938.
 99. O'Connor, G.A., and S.L. Chinault. 2006. Environmental impacts of land applying biosolids. *FL Water Resources J.* 58(5):50-54.
 100. Oladeji, O.O., J.B. Sartain, and G.A. O'Connor. 2006. Agronomic impact of water treatment residuals co-applied with phosphorus sources to Florida sands. *Soil Crop Sci. Soc. FL Proc.* 65:38-48.
 101. Makris, K.C. and G.A. O'Connor. 2007. Beneficial utilization of drinking water treatment residuals as contaminant-mitigating agents. P609-635. In: Sarkar, D., Datta, R., and Hannigan, R. (eds). *Current Perspectives in Environmental Geochemistry*. Geological Society of America Press, Denver, CO.
 102. Agyin-Birikorang, S., G.A. O'Connor, L.W. Jacobs, K.C. Makris, and S.R. Brinton. 2007. Long-term phosphorus immobilization by a drinking-water treatment residual. *J. Environ. Qual.* 36:316-323.
 103. Silveira, M.L., A.C. Change, L.R.F. Alleoni, and G.A. O'Connor. 2007. Metal-associated forms and speciation in biosolids-amended Oxisols. *Commun. Soil Sci. Plt. Anal.* 38:851-869.
 104. Agyin-Birikorang, S., and G.A. O'Connor. 2007. Lability of drinking-water treatment residuals (WTR) immobilized phosphorus: aging and pH effects. *J. Environ. Qual.* 36:1076-1085.
 105. Oladeji, O.O., G.A. O'Connor, J.B. Sartain, and V.D. Nair. 2007. Controlled application rate of water treatment residual for agronomic and environmental benefits. *J. Environ. Qual.* 36:1715-1724.
 106. Elliott, H.A., and G.A. O'Connor. 2007. Phosphorus management for sustainable biosolids

- recycling in the United States. *Soil Biol. Biochem.* 39:1318-1327.
107. Van Alstyne, R., L.R. McDowell, P.A. Davis, N.S. Wilkinson, and G.A. O'Connor. 2007. Effects of an aluminum-water treatment residual on performance and mineral status of feeder lambs. *Small Ruminant Res.* 73:77-86.
 108. Oladeji, O.O., G.A. O'Connor, and S.R. Brinton. 2008. Surface applied water treatment residuals affect bioavailable phosphorus losses in Florida sands. *J. Environ. Mgt.* 88:1593-1600.
 109. Agyin-Birikorang, S. G.A. O'Connor, O.O. Oladeji, T.A. Obreza, and J.C. Capece. 2008. Drinking-water treatment (WTR) effects on the phosphorus status of field soils amended with biosolids, manure, and fertilizer. *Commun. Soil Sci. Pt. Anal.* 39: 1700-1719.
 110. Oladeji, O.O., J.B. Sartain, and G.A. O'Connor. 2008. Soil test methods for Florida sands treated with an Al-water treatment residual and various phosphorus sources. *Commun. Soil Sci. Pt. Anal.* 39:2619-2636.
 111. Oladeji, O.O., G.A. O'Connor, and J.B. Sartain. 2008. Relative phosphorus phytoavailability of different phosphorus sources. *Commun. Soil Sci. Pt. Anal.* 39:2398-2410.
 112. Chinault, S.L., and G.A. O'Connor. 2008. Phosphorus release from a biosolids-amended sandy Spodosol. *J. Environ. Qual.* 37:937-943.
 113. Alleoni, R.F.L., S.R. Brinton, and G.A. O'Connor. 2008. Runoff and leachate losses of phosphorus in a sandy Spodosol amended with biosolids. *J. Environ. Qual.* 37:259-265.
 114. Agyin-Birikorang, S., G.A. O'Connor, and S.R. Brinton. 2008. Evaluating phosphorus loss from a Florida Spodosol as affected by P-source application methods. *J. Environ. Qual.* 37:1180-1189.
 115. O'Connor, G.A., H.A. Elliott, and R.K. Bastian. 2008. Degraded water reuse: an overview. *J. Environ. Qual.* 37:S-157-S-168.
 116. Felix, T., L. McDowell, G. O'Connor, N. Wilkinson, J. Kivipelto, M. Brennan, R. Madison, L. Warren, and J. Brendemuhl. 2008. Effects of dietary aluminum source and concentration on mineral status of feeder lambs. *Small Ruminant Research.* 80:1-7.
 117. Agyin-Birikorang, S., G.A. O'Connor, and J.C. Bonzongo. 2009. Modeling solid phase control of drinking-water treatment residual (WTR) immobilized phosphorus solubility on soils. *Commun. Soil Sci. Pt. Anal.* 40: 1747-1769.
 118. Agyin-Birikorang S., Oladeji, O.O., O'Connor G.A., Obreza T.A., and Capece J.C. 2009. Efficacy of drinking-water treatment residual in controlling off-site phosphorus losses: A field study in Florida. *J. Environ. Qual.* 38: 1076-1085.

119. Oladeji, O.O., J.B. Sartain, and G.A. O'Connor. 2009. Land application of aluminum water treatment residual: aluminum phytoavailability and forage yield. *Commun. Soil Sci. Plt. Anal.* 40:1483-1498.
120. Agyin-Birikorang, S., and G.A. O'Connor. 2009. Aging effects on reactivity of an aluminum-based drinking water treatment residual as a soil amendment. *Sci. Total Environ.* 407:826-834.
121. Madison, R.K., L.R. McDowell, G.A. O'Connor, N.S. Wilkinson, P.A. Davis, A.A. Adesogan, T.L. Felix, and M. Brennan. 2009. Effects of aluminum from water-treatment residual applications to pastures on mineral status of grazing cattle and mineral concentrations of forages. *Commun. Soil Sci. Plt. Anal.* 40:1-27.
122. Brown, S., D. Devin-Clark, M. Doubrava, and G.A. O'Connor. 2009. Fate of 4-nonylphenol in a biosolids amended soil. *Chemosphere* 75: 540-554.
123. Miller, M, and G.A. O'Connor. 2009. The longer-term phytoavailability of biosolids-phosphorus. *Agron. J.* 101: 889-896.
124. Li, Y.C., E. Hanlon, G. O'Connor, J. Chen, and M. Silveira. 2010. Land application of compost and other wastes (by-products) in Florida: regulations, characteristics, benefits and concerns. *HortTechnology* 20: 41-51..
125. Snyder, E.H., G.A. O'Connor, and D.C. McAvoy. 2010. Measured physicochemical characteristics and biosolids concentrations of the antimicrobial triclocarban (TCC). *Sci. Total Environ.* 408: 2726-2732.
126. Snyder, E.H., G.A. O'Connor, and D.C. McAvoy. 2010. Fate of ¹⁴C-triclocarban in biosolids amended soils. *Sci. Total Environ.* 408: 2667-2673.
127. Snyder, E.H., G.A. O'Connor, and D.C. McAvoy. 2010. Bioaccumulation and toxicity of biosolids-borne triclocarban. *Chemosphere* 82:460-467.
128. Castillo, M. S., L. E. Sollenberger, J.M.B Vendramini, K.R. Woodard, G.A. O'Connor, and Y.C. Newman. 2010. Municipal biosolids as an alternative nutrient source for bioenergy crop production: Elephantgrass production and soil response. *Agron. J.* 102: 1303-1308.
129. Castillo, M. S., L. E. Sollenberger, J.M.B Vendramini, K.R. Woodard, G.A. O'Connor, and Y.C. Newman. 2010. Municipal biosolids as an alternative nutrient source for bioenergy crop production: Decomposition and organic nitrogen mineralization.
130. Castillo, M.S., L.E. Sollenberger, J.M.B. Vendramini, K.R. Woodward, G.A. O'Connor, M.L. Silveira, and J.B. Sartain. 2011. Incorporation of municipal biosolids affects organic N mineralization and elephantgrass biomass production. *Agron. J.* 103: 899-905.

131. Agyin-Birikorang, S., G.A. O'Connor, and J.E. Erickson. 2011. Sustainable nutrient management package for cost-effective bioenergy biomass production. *J. Plant Nutrition*.36: 1881-1990.
132. Miller, M.L., J.H. Bhadha, G.A. O'Connor, J.W. Jawitz, and J. Mitchell. 2011. Aluminum water treatment residuals as permeable reactive barrier sorbents to reduce phosphorus losses. *Chemosphere* 83: 978-983.
133. Moura, D.R., M.L. Silveira, G.A. O'Connor, and W.R Wise. 2011. Long-term reclaimed water application effects on phosphorus leaching potential in rapid infiltration basins. *J. Environ. Monitoring*. 13: 2457-2462.
134. Obour, A.K., M.L. Silveira, J.M.B. Vendramini, L.E. Sollenberger, and G.A. O'Connor. 2011. Fluctuating water table effect on phosphorus release and availability from a Florida Spodosol. *Nutr. Cycl. Agroecosystems* 91: 207-217.
135. Obour, A.K., Silveira, M.L., Vendramini, J.M.B., Sollenberger, L.E., O'Connor, G.A., and Jawitz, J.W. 2011. Phosphorus fertilization responses on bahiagrass pastures – Forage production and water quality. *Agron. J.* 103: 324-330.
136. Obour, A.K., Silveira, M.L., Vendramini, J.M.B., Jawitz, J.W., O'Connor, G.A., and Sollenberger, L.E. 2011. A phosphorus budget for bahiagrass pastures growing on a typical Florida Spodosol. *Agron J.* 103: 611-616.
137. Snyder, E.H., G.A. O'Connor, and D. McAvoy. 2011. Bioaccumulation and toxicity of biosolids-borne triclocarban. *Chemosphere* 82: 460-467.
138. Waria, M., G.A. O'Connor, and G. S. Toor. 2011. Biodegradation of triclosan (TCS) in biosolids-amended soils. *Environ. Toxicol. Chem.* 30: 2488-2496.
139. Pannu, M.W., G.A. O'Connor. 2012. Toxicity and bioaccumulation of biosolids-borne triclosan in food crops. *Environ Toxicol & Chem* 31: 2130-2137.
140. Pannu, M.W., G. A. O'Connor, and G.S. Toor. 2012. Toxicity and bioaccumulation of biosolids-borne triclosan in terrestrial organisms. *Environ Toxicol & Chem* 31:646-653.
141. Agyin-Birikorang, Sampson ;O'Connor, George ;Pullammanappallil, Pratap ;Mohan, G.2013. Recovery of essential plant nutrients from biofuel residual. *Journal of Sustainable Bioenergy Systems*.3: 149-159.
142. Silveira, Maria, and G.A. O'Connor. 2013. Temperature effects on phosphorus release from a biosolids-amended soil. *Applied and Environmental Soil Science*. doi.org/10.1155/2013/981715.

143. Silveira, M., J. Vendramini, X. Sui, L. Sollenberger, and G. O'Connor. 2013. Screening Perennial warm-season bioenergy crops as an alternative for phytoremediation of excess soil P. *Bioenergy Research* 6: 469-475.
144. Snyder, E.H., and G.A. O'Connor. 2013. Risk assessment of land-applied biosolids-borne triclocarban (TCC). *Sci Total Environ.* 442: 437-444.
145. Agyin-Birikorang, G.A. O'Connor, P. Pullammanappallil, and G. Mohan. 2013. Recovery of essential plant nutrients from biofuel residuals. *J. Sustainable Bioenergy Systems.* 3: 149-159.
146. Gonzalez, R., J.B. Sartain, J. Kruse, T. Obreza, G.A. O'Connor, and W. Harris. 2013. Orthophosphate leaching in St. Augustine and Zoysiagrass grown in sandy soil under field conditions. *J. Environ. Qual.* 42: 749-757.
147. Sidhu, H., C. Wilson, and G. O'Connor. 2015. Endocrine disrupting chemicals in reclaimed water and residential ponds and exposure potential for dislodgeable residues in turf irrigated with reclaimed water. *Arch Environ Contam Toxicol.* DOI 10.1007/s00244-015-0147-6.

1

Proceedings

1. O'Connor, G.A. and C. Cull. 1977. Minimizing the salt burden of Pecos River irrigation drainage water. *Proc. Intl. Salinity Conf. Managing Saline Water for Irrigation.* H.E. Dregne (ed). pp. 504-505.
2. O'Connor, G.A., C.S. Park, and M. Collins. 1980. Using saline water for crop production in New Mexico. *Proc. Inter-Amer. Conf. on Salinity and Water Management*, p. 19-34.
3. O'Connor, G.A. 1980. Saline water utilization--An international prospective. *Proc. N.M. Water Resources Res. Inst.* p. 68-77.
4. McCaslin, B.D., G.A. O'Connor, and J.S. Sivinski. 1980. Aspects of land application of sewage solids and gamma-irradiated dried sewage solids on calcareous soils. In: *National Symposium on the Use of Cesium-137 to Process Sludge for Further Reduction of Pathogens.* SAND 80-2744. Sandia National Lab.
5. Watson, J. and G.A. O'Connor. 1981. Using saline water for crop production in New Mexico. *Proc. 2nd Inter-Amer. Conf. Salinity Water Mgmt. Tech.* pp. 228-246.
6. O'Connor, G.A. and B.C. Fairbanks. 1982. Fate of toxic organics in sludge amended soils. *Proc. Nat'l Conf. on Composting of Municipal and Industrial Sludges.* pp. 6-14.
7. Fairbanks, B.C. and G.A. O'Connor. Toxic organic behavior in sludge-amended soils. *Proc. Intern'l Conf. on Environ. Contam., London.* 1984. pp. 80-83.
8. O'Connor, G.A. Trace metal sorption in sludge-amended soils. *Proc. Intern'l Conf. on*

- Environ. Contam., London. 1984. pp. 225-231.
9. Fairbanks, B.C. and G.A. O'Connor. Toxic organic behavior in sludge-amended soils. 7th Annual Madison Waste Conf., Madison, Wisc. 1984. pp. 161-165.
 10. O'Connor, G.A. Characterizing solute retention in New Mexico soils. Proc.of Symp. on Water Quality and Pollution in New Mexico. N.M. Bureau of Mines and Minerals. Hydrologic Rpt. #7. p. 260-270, 1984.
 11. O'Connor, G.A. and K.L. Knudtsen. 1985. Phosphorus solubility in sludge-amended calcareous soils. Proc. Intern'l Conf. Management Strategies for Phosphorus in the Environment. pp. 365-370, Lisbon, 1985.
 12. O'Connor, G.A. 1985. Coping with salinity and sodium. Proc. Southwest Turfgrass Conference, Albuquerque, NM.
 13. O'Connor G.A. 1988. Plant availability of sludge-borne toxic organics. Proc. 3rd Intl. Conf. Environ. Contamin., Venice, 1988. pp. 180-183.
 14. O'Connor, G.A. 1988. Soil as a waste disposal media. Proc. XXI Congress Nacional de la Ciencia del Suelo, Juarez, Mexico, 1988.
 15. O'Connor, G.A., G.A. Eiceman, C.A. Bellin, and J.A. Ryan. 1989. Sludge organics bioavailability. pp. 406-417. Proc. 1989 Battelle Symposium on Solid/Liquid Separations [ed] N.S. Muralidhara. Batelle Press (Dec. 5-7, 1989).
 16. O'Connor, G.A. 1989. Degradation, crop uptake, and risk of micropollutants in sewage sludge. Proc. Sewage Sludge: Quality Aspects and Risk in Connection with Land Application. Swedish Water and Wastewater Assoc. (April 11-12, 1989).
 17. O'Connor, G.A. 1994. Sewage Sludge: toxic organics considerations. In Sewage Sludge: land utilization and the environment. (ed.) Clapp, C.E., W.E. Larson, and R.H. Dowdy. Soil Sci. Soc. Amer. Misc. Publ. p. 33-34.
 18. O'Connor, G.A. 1997. Sewage Sludge: land utilization and the environment toxic organics considerations. Proceedings Intn'l Conf. Modern Agric and Environ. Rehovot, Israel, June, 1994. pp. 299-307.
 19. O'Connor, G.A. 1998. Fate and potential of xenobiotics. In: Beneficial co-utilization of agricultural, municipal and industrial by-products. (eds.). Brown, S., J.S. Angle, and L. Jacobs. Kluwer Academic Publ. pp. 203-217.
 20. O'Connor, G.A., L.R. McDowell, and H. Nguyen. 1999. Assessment of risk from biosolids-Mo. Proc. 5th International Conf. Biogeochemistry Trace Elements. Vienna Austria, July, 1999. Pp 278-279.

21. O'Connor, G.A., and L.R. McDowell. 1999. Understanding fate, transport, bioavailability, and cycling of metals in land-applied biosolids. Proc. WEF/AWWA Joint residuals and Biosolids Management Conf., Charlotte, NC.
22. O'Connor, G.A. and H.A. Elliott. 2002. Co-application of biosolids and water treatment residuals. Trans. World Congress Soil Sci. (CD). 14-21 Aug. 2002, Bangkok, Thailand.
23. Brandt, R.C., H.A. Elliott, and G.A. O'Connor. 2002. Comparative evaluation of water extractable P in biosolids and animal manures. WEF Biosolids Conf. Proc. (CD). 16th Annual Residuals and Biosolids Management Conf. 3-6 Mar, 2002, Austin, TX.
24. Elliott, H.A., R.C. Brandt, and G.A. O'Connor. 2004. Rationale phosphorus management in biosolids recycling. WEF Biosolids Conf. 18th Annual Residuals and Biosolids Management Conf. Fe, 2004, Salt Lake City, UT. [Accidentally omitted from proceedings CD].

Books

1. Bohn, H.N., B.L. McNeal, and G.A. O'Connor. 1st edition, 1979. Soil Chemistry. John Wiley & Sons. Pp 329. 2nd edition. 1985. pp. 349. 3rd edition. 2001. (Also appears in Hungarian and Spanish).
2. Reddy, K.R., G.A. O'Connor, and C. L. Schelske. (Eds.).1999. Phosphorus Biogeochemistry in Subtropical Ecosystems. Pp. 707. Lewis Publishers, Boca Raton, FL.
3. Strawn, D., H. Bohn, and G. O'Connor. 2015. Soil Chemistry, 4th edition. John Wiley & Sons.

Extension Publications

1. Hoff, G.B. and G.A. O'Connor. 1972. Leaching for excess salinity control. Plt. Sci. Guide 400 A-117.
2. O'Connor, G.A. and G.B. Hoff. 1973. Use naturally available amendments in reclaiming sodic soils. Plt. Sci. Guide 400 A-118. (Reissued 1980 with C. Glover.)
3. Obreza, T.A. and G.A. O'Connor. 2003. The basics of biosolids application to land in FL. SL 205. UF/IFAS (EDIS).
4. Agyin-Birikorang, G.A. O'Connor, and T.A. Obreza. 2009. Drinking water treatment residuals to control phosphorus in soils. SL 300. UF/IFAS (EDIS).
5. Agyin-Birikorang, G.A. O'Connor, and T.A. Obreza. 2009. Are drinking water treatment residuals safe for land application? SL 299. UF/IFAS (EDIS).

Research Reports

1. O'Connor, G.A. 1972. Reclamation of a sodium-affected soil with limited gypsum applications. N.M. Agric. Exp. Sta. Res. Rpt. 242.
2. O'Connor, G.A. 1974. Limited gypsum applications on sodic soils. N.M. Agric. Exp. Sta. Res. Rpt. 290.
3. O'Connor, G.A. and V. Lee R. 1978. Effects of sulfuric acid on soil permeability and irrigation water quality. N.M. Agric. Exp. Sta. Res. Rpt. 361.
4. Nefae, Rabeh and G.A. O'Connor. 1978. Effects of sulfuric acid on iron availability in New Mexico soils. N.M. Agric. Exp. Sta. Res. Rpt. 362.
5. Essington, M.E. and G.A. O'Connor. 1980. Soil and plant response to applications of phosphorus fertilizers and sulfuric acid. N.M. Agric. Exp. Sta. Res. Rpt. 417.
6. Clevenger, T., B. Ahrens, G.A. O'Connor, D. Nelson, and B. Gorman. 1983. Summary of current federal regulation for land application of municipal sewage sludge. N.M. Agric. Exp. Sta. Spec. Rpt. 54.
7. Clevenger, T., B. Ahrens, G.A. O'Connor, D. Nelson, and B. Gorman. 1983. Sewage sludge: A usable commodity for land application. N.M. Agric. Exp. Sta. Spec. Rpt. 55.

Bulletins

1. Davis, J.G. and G.A. O'Connor. 1980. Minimized leaching studies with Pecos River water. N.M. Agric. Exp. Sta. Bull. No. 674.
2. McCaslin, B.D. and G.A. O'Connor. 1982. Potential fertilizer value of gamma-irradiated sewage sludge on calcareous soils. N.M. Agric. Exp. Sta. Bull. No. 692.
3. O'Connor, G.A., R.S. Bowman, M.A. Elrashidi, and R. Keren. 1983. Solute retention and mobility in soils of New Mexico: I. Characterization of solute retention reactions. Agric. Exp. Sta. Bull. No. 701.
4. McCaslin, B.D., A.S. Sadler, and G.A. O'Connor. 1985. Application of spent sulfuric alkylation acid and sulfuric acid to two New Mexico soils. Agric. Exp. Sta. Bull. No. 714.

Directed Research

1. Undergraduates (special research problems)
 - a) J.G. Davis, 1975-1976
 - b) C. Cull, 1976-1977

- c) S. Weber, 1978-1979
- d) J. Amonette, 1978-1979
- e) M.E. Essington, 1978-1980
- f) Candace O'Connor, 1981-1982
- g) D. Manuchia, 1981-1983
- h) D. Kiehl, 1987
- i) S. Brinton, 1996
- j) N. Watson, 1998
- k) G. Lester, 1999

2. Graduate Students

- a) Rebeh Nefae, M.S. 1977
- b) J. Glenn Davis, M.S. 1978
- c) C.S. Park, M.S. 1979
- d) R.S. Bowman, Ph.D. 1982
- e) A.S. Sadler, M.S. 1984
- f) D. Miller, M.S. 1984
- g) M. Afyuni-Mobarekh, M.S. 1986
- h) J. Aranda, M.S. 1987
- i) Farhad Khorsandi, M.S. 1988
- j) Jin Yan, M.S. 1989
- k) Cheryl Bellin, M.S. 1989
- l) Jesus Lujan, M.S. 1989
- m) Hai Nguyen, M.S. 1998
- n) Grant Ruple, M.S. 1998
- o) Scott Brinton, M.S. 2000
- p) Peng Lu, M.S. (transferred to Computer Sci.)
- q) Konstantinos Makris, PhD 2004
- r) Collin Lane, M.S. 2002
- s) Michael Miyittah, M.S. 2004
- t) Sampson Agyin-Birikorang, PhD 2006
- u) Olawale Oladeji, PhD 2006
- v) Sarah Chinault, M.S. 2007
- w) Elizabeth Hodges Snyder, PhD 2009
- x) Jaya Das, PhD 2010 co-advisor
- y) Matt Miller, M.S. 2008
- z) Augustine Obour, PhD, 2010 co-advisor
- aa) Daniel Moura, MS 2009 co-advisor
- bb) Manmeet Waria, PhD 2011
- cc) Harmanpreet Sidhu, MS 2013, co-advisor
- dd) Harmanpreet Sidhu, PhD, co-advisor (currently enrolled)
- ee) Jianru Shi, MS, 2015
- ff) Tipanun Upanisakorn, MS (Currently enrolled)

3. Professionals

- a) Margaret Collins (Research Specialist) 1978-1979
- b) Mike Hosea (Research Specialist) 1978-1979
- c) Richard Doyle (Post Doc) 1979-1980
- d) Elizabeth Doyle (Research Specialist) 1979-1980
- e) Sobhi Risk (FAO Fellow - Egypt) 1979
- f) Moustafa Elrashidi (Post Doc) 1980-1983
- g) Rami Keren (Sabbatical - Israel) 1980-1981
- h) Josef Kozak (FAO Fellow - Czechoslovakia) 1981
- i) Barbara Fairbanks (Research Specialist) 1980-1983
- j) John Watson (Research Specialist) 1980
- k) James Frampton (Research Specialist) 1980-1981
- l) Naomi Schmidt (Research Specialist) 1981-1983
- m) Mike Bodi (Research Specialist) 1982
- n) Gary Cline (Post Doc) 1982-1983
- o) Karen Knudtsen (Research Specialist) 1984-1985
- p) Regina Kloskowski (Post Doc) 1985-1986
- q) Jonas Anjos (Sabbatical - Brazil) 1996-1997
- r) Colin Chen (Post Doc) 1997
- s) Odi Villapando (Post Doc) 1998
- t) Dibs Sarkar (Post Doc) 1998-2000
- u) H.E. Elliott (Sabbatical – Penn. State Univ.) 2000
- v) Scott Brinton (Research Associate) 2000-2003; 2006
- w) Maria Silveira (Senior Chemist), 2004-2005
- x) Luis Alleoni (Sabbatical – Brazil), 2005-2006
- y) Sampson Agyin-Birikorang (Chemist, Post-doc), 2007-2009
- z) Gioliano Marchi (Sabbatical – Brazil), 2014
- aa) Marcela Valenzuela (Visiting PhD student – Chile), 2014

Research Funding at UF: GAO share ~\$2.5 million

Major External Grants Received (since 2000)

1. “Characterizing the forms, solubility, bioavailability, and mineralization rates of P in biosolids, manures, and commercial fertilizer. (Phase I)”. Water Environ. Res. Fdn. \$195,430 (direct and indirect). 1/2/00-2/1/02. PI. Addendum to above added \$75,000 to contract. Funding from the City of Philadelphia Water Department through WERF.
2. “Phosphorus contamination potential of groundwater associated with land application of domestic and animal waste products on FL”. US Geol. Survey (WRRC, FL). \$17,380 (direct and indirect). 3/1/00-2/28/01. PI.

3. "Co-application of water treatment residuals and biosolids" FL Dept. Environ. Protection. \$10,000 (direct and indirect). 2/10/00-11/3/00. PI.
4. "Fate of land-applied, residuals-bound P". FL Dept. Environ. Protection. \$270,000 (direct and indirect). 3/1/97-12/1/99. PI.
5. "Understanding fate, transport, bioavailability and cycling of metals in land-applied biosolids". Water Environ. Res. Fdn. \$419,194 (direct and indirect). 6/4/96-7/1/99. Co-PI with L.R. McDowell. Also received in-kind (analytical support) of \$20,000 from Cyprus Climax Corp. and \$3,000 (SHARE) contribution from Int'l Molybdenum Assoc. to further project objectives.
6. SHARE (unrestricted) – used to offset expenses associated with national symposium on Mo risk assessment in Breckenridge, CO, 1999.
 - \$10,000 Milwaukee Metro. Sewage
 - \$2,000 Cyprus Amax Minerals, Co.
 - \$3,000 International Mo Assoc.
7. "Reuse of Carlton Reject Water study" Sarasota County, FL. \$100,000 (direct and indirect). 10/1/96-9/30/98. Co-PI with J.B. Sartain.
8. "Land Application of Residuals and Chicken Manure in the Lake Okeechobee Watershed" SFWMD. \$600,000 (direct and indirect). 7/00-7/03. Sub-contractor; share = \$30,000/yr.
9. "Characterizing the forms, solubility, bioavailability, and mineralization rates of P in biosolids, manures, and commercial fertilizer. (Phase II)". Water Environment Research Foundation. \$300,000 (direct and indirect). 4/1/02 – 4/28/06.
10. "Land application of residuals and manure in the Lake Okeechobee watershed: P considerations." US Environ. Protect. Agency. \$100,000. 2/20/02 – 2/19/06.
11. "Soil Amendments" sub-project to "Hydrologic and biochemical processes regulating P retention in the Lake Okeechobee drainage basin". FL Dept. Environ. Protect. \$53,500. 2/14/03 – 2/13/04.
12. "Sustainable Land Application Conference- Partial Support". US Environ. Protect. Agency. \$40,000. 6/01/03 – 6/30/04.
13. "Sustainable Land Application Conference – Conference Support" US Dept Interior (FL WRRC). \$16, 029. 3/1/03-2/29/04.
14. "Sustainable Land Application Conference Support". US Dept. Agriculture. \$5459. 10/21/03-3/1/04.
15. "Agronomic and Environmental Characterization of P in FL Biosolids." FWEA Utility Council. \$56,250. 1/1/05 – 12/31/08.
16. "Characterization of Milorganite 6-2-0 Biosolids Relating to P Potential for Soil Water Movement." Milorganite, Inc. \$39,425. 1/1/05-12/31/08.
17. "Fate and Transport of Biosolids-borne Triclocarban". USEPA. \$87,400. 9/1/05-8/31/10.
18. "Toxicity of Aluminum from Water treatment Residuals on Mineral Status of Grazing Ruminants." USDA (TSTAR). \$49,000.7/1/05-6/30/08. Co-PI share \$17,250.
19. "Site-specific Determination of Soil Capacity to Assimilate or Release P Applied as Manure, Fertilizer, Compost, or Biosolids." FLDACS. \$50,000. 7/1/06-6/30/07.

20. "Fate and Transport of Biosolids-borne TCS and TCC". MWRDGC. \$50,000. 5/1/07-12/30/08.
21. "Northern Everglades Chemical Treatment Pilot Project". SFWMD, \$9227. 12/04-08-5/07/09.
22. "Permeable Reactive Barriers for Passive P Management in the Lake Okeechobee Basin". SFWMD (CoPI), \$50,000. 7/23/09-9/15/10.
23. "Fate and Transport of Biosolids-Borne TCS and TCC". MWRDGC. \$146,500 (PI), 1/1/09-12/31/11 (Phase II).
24. "Bioaccumulation of Chemicals of Emerging Concern in Food Crops from Reclaimed Water". AFRI. \$450,000. 1/1/11-12/31/14 (Consultant, share= \$15,000)
25. "Effects of Humate Quality and Application Method on Restoration of Mined Land" DuPont. \$54,000. 1/1/11 -12/31/12. (Co-PI with Ma and Harris, funding share minimal)
26. "The US-India Consortium for Development of Sustainable Advanced Lignocellulosic Biofuel Systems". JCERDC (DoE). 10/1/12-9/30/16. Co-PI share \$120,000